

Dr. P.G. Padmaja, Principal Scientist, Entomology has 24 years experience in the field of Insect-Plant interactions at Indian Institute of Millets research (IIMR), Hyderabad. She obtained Ph.D. in Entomology from IARI, New Delhi. She was awarded the post Doctoral Fellow at Rothamsted Research in the Biological Chemistry Department, United Kingdom. Her key area of research is host plant resistance with special emphasis on sorghum shoot fly.



Her research has led to identification of stable sources of resistance to sorghum shoot fly, development of artificial diet for its mass rearing, formulation of novel plant derived kairomonal blends to attract the fly and biochemical characterization of plant surface waxes, identification of QTLs associated with shoot fly resistance in sorghum. She is instrumental in development and registration of three improved shoot fly resistant genetic stocks that are being used in breeding sorghum for resistance. As a team member developed and successfully evaluated transgenic sorghum with *Cry1B* gene conferring resistance to sorghum stem borer. Isolated and identified a potent entomopathogenic fungal strain, *Metarrhizium rileyi* against fall army worm in sorghum. She has also developed an integrated approach to extend the shelf life of pearl millet flour to more than 60 days.

Awards/Fellowships

Fellow:

- Royal Entomological Society, London (FRES)
- Rothamsted International Fellow, UK
- Nuffic Fellow, Netherlands
- Entomological Society of India, New Delhi
- Plant Protection Association of India, Hyderabad
- National Academy of Biological Sciences, Chennai (NABS)

Awards:

- Best Woman Scientist Award for outstanding contributions in Plant Protection by the National Academy of Biological Sciences, Chennai in the year 2018
- Best Woman Scientist Award in 2019 by Applied Zoologists Research Association (AZRA) for outstanding research in developing pest management strategy for sorghum shoot fly and stemborer using HPR
- Best Woman Scientist Award in 2019 by Dr B Vasantharaj David Foundation for Commendable contributions to Insect-Plant Interactions.

She has guided students for M.Sc. and Ph.D. programmes. She has authored/co-authored/edited books and book chapters notably Insect Pests of Millets - systematics, bionomics, and management and Biotic stress resistance in millets.

Publications

Total publications: 110: Papers in peer reviewed journals: 35; Books: 2; Monograph: 1; Book chapters: 6; Research Bulletins: 3; Papers in conferences/symposia: 34; Other publications: 29